CalPERS Currency Strategy

Building on Capabilities

- Outline of plans
- Currency's role in a portfolio
- Review of CalPERS currency experience
- Active currency strategies in the market
- Proposed plan
- Next Steps and Conclusion

Outline

All existing programs and goals to remain unchanged

Those programs are:

- Currency Overlay Program with a primary goal to reduce risk and add alpha where possible
- The Internal Passive portfolio

Outline – What is being considered

In the near future

 Active alpha currency program, as a stand alone, run internally, subject to Board approval

In 2007

 Currency risk reduction to be considered at the overall CalPERS portfolio level, rather than asset by asset as it is presently

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Currency's role in a Portfolio

In its most simple form....

Currency policy should either seek

- 1) To reduce portfolio <u>risk</u> or
- 2) To increase portfolio <u>return</u>

Currency's Role in a Portfolio

- Diversification
- Reduction of portfolio volatility
- Alpha: multitude of empirical evidence show that it exists

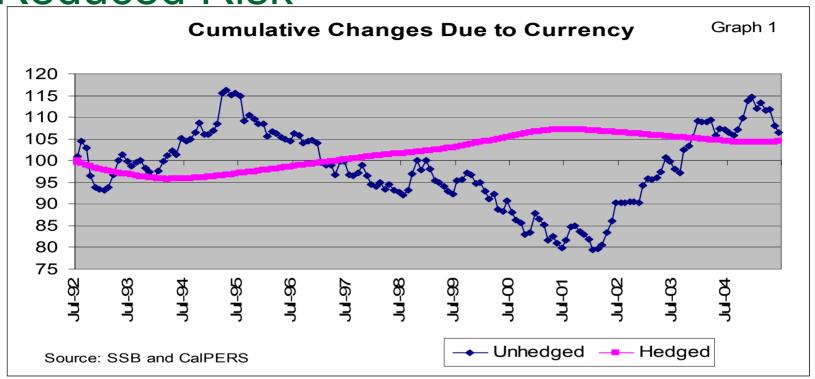
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CalPERS currency activities primarily emphasize <u>risk reduction</u>, as decided by the IC in 1991

Currency Overlay Program Consists of

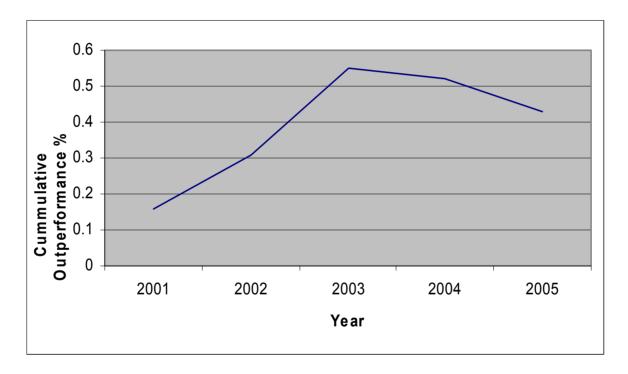
- Externally managed quasi-active portfolios
- Internally managed passive hedge portfolio (inception 2001)

CalPERS Total Currency Program Has Reduced Risk



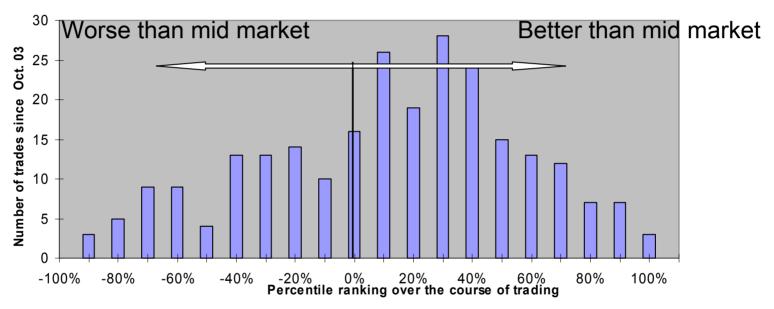
- The blue line is the unhedged currency return (i.e. no overlay)
- The pink line is CalPERS hedge benchmark portfolio
- Smoother is less volatile 41 bps annualized since inception

Internally Managed Passive Portfolio has reduced risk; without the expected negative tracking error



Results: exceeded benchmark by 43 bps since inception

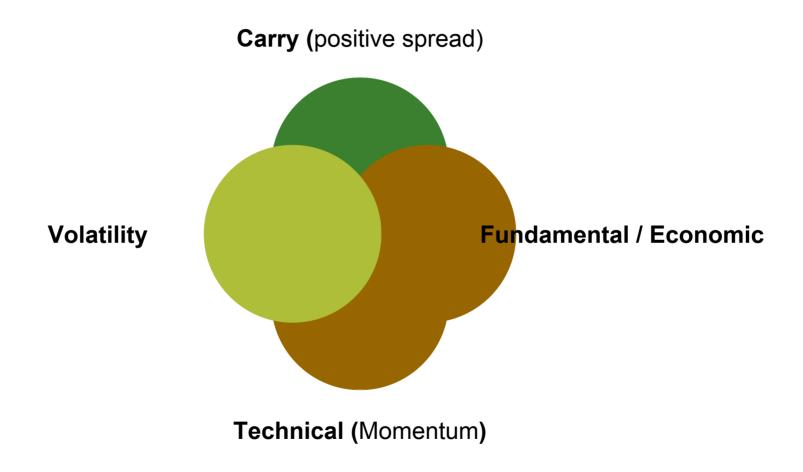
Internal execution of CalPERS currency needs. One would have expected a normal distribution...



 CalPERS result is positively skewed with a saving of approximately \$4 million relative to previous alternative

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Active Currency Investment Styles



Currency Styles

- Carry driven by spreads that exist on forward currency
- Fundamental driven by measurable economic data
- Technical driven by price changes, momentum
- Volatility driven by the rate of change of prices

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Based on the 4 Currency Styles

- Forge and maintain strategic relationships with major players
- Develop internal quantitative models to suit each style
- Develop strategies for allocating capital to various styles
- Develop and maintain risk control measures and guidelines through Policy Subcommittee

We propose an <u>addition</u> of active currency program with emphasis on <u>generating return</u>

- Thus far the focus has been on risk reduction. We propose changing the focus to include RETURN, as well as risk reduction.
- Stand alone currency alpha program will <u>start small</u> and build only after positive results.
- This will utilize both internally and externally managed portfolios

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Next Steps

We plan to...

- Bring an agenda item to the IC for an internal active alpha program
- Subject to IC approval:
 Develop guidelines for active alpha to be approved by the Policy Subcommittee
- Plan an RFP for external active alpha managers

We are not...

- Changing existing programs
- Restricting any asset class from investing internationally, be it hedged or unhedged

2007 and beyond

- In 2007 at the Asset Allocation Workshop, consider currency at the total fund level
- Conduct an RFP for external active alpha managers

Conclusion

- CalPERS has had a successful currency program
- Existing programs should remain unchanged
- Staff is working toward an internal active currency alpha program
- Currency risk should be considered at the overall CalPERS portfolio level
- Conduct an RFP for external active alpha managers in 2007